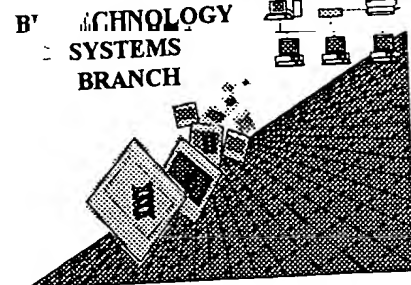


Neisendorf



# **RAW SEQUENCE LISTING** **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following CRF diskette:

Application Serial Number: 09/229,751

Art Unit / Team No. : 1618

Date Processed by STIC: 4/27/99

**THE ATTACHED PRINTOUT EXPLAINS THE ERRORS DETECTED.**

**PLEASE BE SURE TO FORWARD THIS INFORMATION TO THE APPLICANTS BY EITHER:**

**1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANTS ALONG WITH A NOTICE TO COMPLY or,**

**2) CALLING APPLICANTS AND FAXING THEM A COPY OF THE PRINTOUT WITH A NOTICE TO COMPLY**

**THIS WILL INSURE THAT THE NEXT SUBMISSION RECEIVED FROM THEM WILL BE ERROR FREE.**

**IF YOU HAVE ANY FURTHER QUESTIONS, PLEASE CALL:**

**ARTI SHAH 703-308-4212**

# Raw Sequence Listing Error Summary

## ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER:

09/229757

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 J Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line.  
This may occur if your file was retrieved in a word processor after creating it.  
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2    Wrapped Aminos The amino acid number/text at the end of each line "wrapped" down to the next line.  
This may occur if your file was retrieved in a word processor after creating it.  
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3    Incorrect Line Length The rules require that a line not exceed 72 characters in length. This includes spaces.  
All text must be visible on page.
- 4    Misaligned Amino Acid Numbering The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
- 5    Non-ASCII This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.  
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6    Variable Length Sequence(s)    contain n's or Xaa's which represented more than one residue.  
As per the rules, each n or Xaa can only represent a single residue.  
Please present the maximum number of each residue having variable length and indicate in the (ix) features section that some may be missing.
- 7    Wrong Designation Sequence(s)    contain amino acid or nucleic acid designators which are not standard representations as per the Sequence Rules (Please refer to paragraph 1.822)
- 8 J Skipped Sequences (OLD RULES) Sequence(s) 18,32-38,46-50,57-59,71-79,88-98,109 missing. If intentional, please use the following format for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X:  
(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")  
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:  
This sequence is intentionally skipped  
  
Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9    Skipped Sequences (NEW RULES) Sequence(s)    missing. If intentional, please use the following format for each skipped sequence.  
<210> sequence id number  
<400> sequence id number  
000
- 10    Use of n's or Xaa's (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 11    Use of <213>Organism (NEW RULES) Sequence(s)    are missing this mandatory field or its response.
- 12    Use of <220>Feature (NEW RULES) Sequence(s)    are missing the <220>Feature and associated headings.  
Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"  
Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32)  
(Sec. 1.823 of new Sequence Rules)
- 13    PatentIn ver. 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).  
Instead, please use "File Manager" or any other means to copy file to floppy disk.

SEQUENCE VERIFICATION REPORT  
PATENT APPLICATION US/09/229,751

DATE: 04/27/1999

TIME: 10:35:34

INPUT SET: S31624.raw

Line	Error	Original Text
28	Wrong application Serial Number	(A) APPLICATION NUMBER: US PCT/US99/00771
66	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
87	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
108	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
129	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
150	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
171	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
192	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
213	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
234	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
255	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
276	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
297	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
318	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
399	Sequence 18 missing	(2) INFORMATION FOR SEQ ID NO:19:
672	Sequence 32 thru 38 missing	(2) INFORMATION FOR SEQ ID NO:39:
819	Sequence 46 thru 50 missing	(2) INFORMATION FOR SEQ ID NO:51:
946	Sequence 57 thru 59 missing	(2) INFORMATION FOR SEQ ID NO:60:
949	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
970	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
983	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:
991	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
1012	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
1033	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
1054	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
1075	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
1096	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
1117	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
1138	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
1159	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
1177	Sequence 71 thru 79 missing	(2) INFORMATION FOR SEQ ID NO:80:
1345	Sequence 88 thru 98 missing	(2) INFORMATION FOR SEQ ID NO:99:
1390	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
1411	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
1432	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
1453	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
1474	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
1495	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
1516	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
1537	Entered (21) and Calc. Seq. Length (0) differ	(A) LENGTH: 21 base pairs
1555	Sequence 109 missing	(2) INFORMATION FOR SEQ ID NO:110:

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/229,751DATE: 04/27/1999  
TIME: 10:35:28

INPUT SET: S31624.raw

This Raw Listing contains the General  
Information Section and those Sequences  
containing ERRORS.

Does Not Comply  
Corrected Diskette Needed

## SEQUENCE LISTING

## (1) General Information:

(i) APPLICANT: Turnbough Jr., Charles L

(ii) TITLE OF INVENTION: Peptide Ligands That Bind to Surfaces

of *↑ modified*  
Bacterial Spores

(iii) NUMBER OF SEQUENCES: 80

*01/17 (see item 8 on Ena summary sheet)*

## (iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Hendricks and Associates

(B) STREET: P.O. Box 2509

(C) CITY: Fairfax

(D) STATE: VA

(E) COUNTRY: USA

(F) ZIP: 22031

## (v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk

(B) COMPUTER: IBM PC compatible

(C) OPERATING SYSTEM: PC-DOS/MS-DOS

(D) SOFTWARE: PatentIn Release #1.0, Version #1.25

## (vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: US PCT/US99/00771

(B) FILING DATE: 14-JAN-1999

(C) CLASSIFICATION:

*There go under*

## (viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Hendricks, Glenna M

(B) REGISTRATION NUMBER: 32,535

(C) REFERENCE/DOCKET NUMBER: turnbough

*↓ (vii) PRIOR APPLICATION DATA:**(A) APPLICATION NUMBER:**(B) FILING DATE:*

## (ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: (703) 591-4470

(B) TELEFAX: (703) 591-4428

ERRORED SEQUENCES FOLLOW:

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/229,751DATE: 04/27/1999  
TIME: 10:35:28

INPUT SET: S31624.raw

63 (2) INFORMATION FOR SEQ ID NO:2:

64

65 (i) SEQUENCE CHARACTERISTICS:

--&gt;

66 (A) LENGTH: 21 base pairs

67 (B) TYPE: nucleic acid

68 (C) STRANDEDNESS: single

69 (D) TOPOLOGY: linear

70

71 (ii) MOLECULE TYPE: DNA (genomic)

72

73 (iii) HYPOTHETICAL: NO

74

75 (iv) ANTI-SENSE: NO

76

77

78

79 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

80

81 AATCATTTTT TGATTAAGCC G

82

83

84 (2) INFORMATION FOR SEQ ID NO:3:

85

86 (i) SEQUENCE CHARACTERISTICS:

--&gt;

87 (A) LENGTH: 21 base pairs

88 (B) TYPE: nucleic acid

89 (C) STRANDEDNESS: single

90 (D) TOPOLOGY: linear

91

92 (ii) MOLECULE TYPE: DNA (genomic)

93

94 (iii) HYPOTHETICAL: NO

95

96 (iv) ANTI-SENSE: NO

97

98

99

100 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

101

102 AATCATTTTT TGAGGTCTCC G

103

104

105 (2) INFORMATION FOR SEQ ID NO:4:

106

107 (i) SEQUENCE CHARACTERISTICS:

--&gt;

108 (A) LENGTH: 21 base pairs

109 (B) TYPE: nucleic acid

110 (C) STRANDEDNESS: single

111 (D) TOPOLOGY: linear

112

113 (ii) MOLECULE TYPE: DNA (genomic)

*global  
format error  
see item 1 on  
Error summary sheet*

*21*

*same  
error*

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/229,751DATE: 04/27/1999  
TIME: 10:35:29

INPUT SET: S31624.raw

114  
115 (iii) HYPOTHETICAL: NO  
116  
117 (iv) ANTI-SENSE: NO  
118  
119  
120  
121 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:  
122  
123 AATCATTTTC TGCCTCGTTG G  
124 21  
125

*same*

126 (2) INFORMATION FOR SEQ ID NO:5:  
127  
128 (i) SEQUENCE CHARACTERISTICS:  
--> 129 (A) LENGTH: 21 base pairs  
130 (B) TYPE: nucleic acid  
131 (C) STRANDEDNESS: single  
132 (D) TOPOLOGY: linear  
133  
134 (ii) MOLECULE TYPE: DNA (genomic)  
135  
136 (iii) HYPOTHETICAL: NO  
137  
138 (iv) ANTI-SENSE: NO  
139  
140  
141  
142 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:  
143  
144 AATCATTTTC TTCCTAAGGT G  
145 21  
146

147 (2) INFORMATION FOR SEQ ID NO:6:  
148  
149 (i) SEQUENCE CHARACTERISTICS:  
--> 150 (A) LENGTH: 21 base pairs  
151 (B) TYPE: nucleic acid  
152 (C) STRANDEDNESS: single  
153 (D) TOPOLOGY: linear  
154  
155 (ii) MOLECULE TYPE: DNA (genomic)  
156  
157 (iii) HYPOTHETICAL: NO  
158  
159 (iv) ANTI-SENSE: NO  
160  
161  
162  
163 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:  
164

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/229,751

DATE: 04/27/1999

TIME: 10:35:29

INPUT SET: S31624.raw

165 AATCATTTTC TGTTGCCGCC G  
166 21  
167

*same*

168 (2) INFORMATION FOR SEQ ID NO:7:  
169

--> 170 (i) SEQUENCE CHARACTERISTICS:  
171 (A) LENGTH: 21 base pairs  
172 (B) TYPE: nucleic acid  
173 (C) STRANDEDNESS: single  
174 (D) TOPOLOGY: linear  
175  
176 (ii) MOLECULE TYPE: DNA (genomic)  
177  
178 (iii) HYPOTHETICAL: NO  
179  
180 (iv) ANTI-SENSE: NO  
181  
182  
183  
184 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:  
185  
186 AATCATTTTT TGCCTCCTCG G  
187 21  
188

189 (2) INFORMATION FOR SEQ ID NO:8:  
190

--> 191 (i) SEQUENCE CHARACTERISTICS:  
192 (A) LENGTH: 21 base pairs  
193 (B) TYPE: nucleic acid  
194 (C) STRANDEDNESS: single  
195 (D) TOPOLOGY: linear  
196  
197 (ii) MOLECULE TYPE: DNA (genomic)  
198  
199 (iii) HYPOTHETICAL: NO  
200  
201 (iv) ANTI-SENSE: NO  
202  
203  
204  
205 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:  
206  
207 AATCATTTTC TGCCTACTGG G  
208 21  
209

210 (2) INFORMATION FOR SEQ ID NO:9:  
211

--> 212 (i) SEQUENCE CHARACTERISTICS:  
213 (A) LENGTH: 21 base pairs  
214 (B) TYPE: nucleic acid

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/229,751DATE: 04/27/1999  
TIME: 10:35:29

INPUT SET: S31624.raw

215 (C) STRANDEDNESS: single  
216 (D) TOPOLOGY: linear  
217  
218 (ii) MOLECULE TYPE: DNA (genomic)  
219  
220 (iii) HYPOTHETICAL: NO  
221  
222 (iv) ANTI-SENSE: NO  
223  
224  
225  
226 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:  
227  
228 AATCATTTTC TGATGCCGAA G  
229 21  
230

--> 231 (2) INFORMATION FOR SEQ ID NO:10:  
232  
233 (i) SEQUENCE CHARACTERISTICS:  
234 (A) LENGTH: 21 base pairs  
235 (B) TYPE: nucleic acid  
236 (C) STRANDEDNESS: single  
237 (D) TOPOLOGY: linear  
238  
239 (ii) MOLECULE TYPE: DNA (genomic)  
240  
241 (iii) HYPOTHETICAL: NO  
242  
243 (iv) ANTI-SENSE: NO  
244  
245  
246  
247 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:  
248  
249 AATCATTTTC TTAAGGGGAC G  
250 21  
251

--> 252 (2) INFORMATION FOR SEQ ID NO:11:  
253  
254 (i) SEQUENCE CHARACTERISTICS:  
255 (A) LENGTH: 21 base pairs  
256 (B) TYPE: nucleic acid  
257 (C) STRANDEDNESS: single  
258 (D) TOPOLOGY: linear  
259  
260 (ii) MOLECULE TYPE: DNA (genomic)  
261  
262 (iii) HYPOTHETICAL: NO  
263  
264 (iv) ANTI-SENSE: NO  
265



RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/229,751DATE: 04/27/1999  
TIME: 10:35:30

INPUT SET: S31624.raw

266  
267  
268 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:  
269  
270 ATTCATTTTT TGCCGCAGAA T  
271 21  
272

*same*

--> 273 (2) INFORMATION FOR SEQ ID NO:12:  
274  
275 (i) SEQUENCE CHARACTERISTICS:  
276 (A) LENGTH: 21 base pairs  
277 (B) TYPE: nucleic acid  
278 (C) STRANDEDNESS: single  
279 (D) TOPOLOGY: linear  
280  
281 (ii) MOLECULE TYPE: DNA (genomic)  
282  
283 (iii) HYPOTHETICAL: NO  
284  
285 (iv) ANTI-SENSE: NO  
286  
287  
288  
289 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:  
290  
291 ATTCATTTTC TTCTTTGGCG T  
292 21  
293

--> 294 (2) INFORMATION FOR SEQ ID NO:13:  
295  
296 (i) SEQUENCE CHARACTERISTICS:  
297 (A) LENGTH: 21 base pairs  
298 (B) TYPE: nucleic acid  
299 (C) STRANDEDNESS: single  
300 (D) TOPOLOGY: linear  
301  
302 (ii) MOLECULE TYPE: DNA (genomic)  
303  
304 (iii) HYPOTHETICAL: NO  
305  
306 (iv) ANTI-SENSE: NO  
307  
308  
309  
310 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:  
311  
312 AATCATTTTC TGATTAGGAA G  
313 21  
314

315 (2) INFORMATION FOR SEQ ID NO:14:

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/229,751

DATE: 04/27/1999

TIME: 10:35:30

INPUT SET: S31624.raw

316  
317 (i) SEQUENCE CHARACTERISTICS:  
--> 318 (A) LENGTH: 21 base pairs  
319 (B) TYPE: nucleic acid  
320 (C) STRANDEDNESS: single  
321 (D) TOPOLOGY: linear  
322  
323 (ii) MOLECULE TYPE: DNA (genomic)  
324  
325 (iii) HYPOTHETICAL: NO  
326  
327 (iv) ANTI-SENSE: NO  
328  
329  
330  
331 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:  
332  
333 AATCATTTTC TGCCGACTGC T  
334 21  
335

*same  
env*

OK  
--> 399 (2) INFORMATION FOR SEQ ID NO:19:  
400  
401 (i) SEQUENCE CHARACTERISTICS:  
402 (A) LENGTH: 7 amino acids  
403 (B) TYPE: amino acid  
404 (C) STRANDEDNESS: single  
405 (D) TOPOLOGY: linear  
406  
407 (ii) MOLECULE TYPE: peptide  
408  
409 (iii) HYPOTHETICAL: NO  
410  
411 (iv) ANTI-SENSE: NO  
412  
413  
414  
415 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:  
416  
417 Asn His Phe Leu Ile Lys Pro  
418 1 5  
419

*seq 18 missing (see back  
pages)*

--> 672 (2) INFORMATION FOR SEQ ID NO:39:  
673  
674 (i) SEQUENCE CHARACTERISTICS:  
675 (A) LENGTH: 5 amino acids  
676 (B) TYPE: amino acid  
677 (C) STRANDEDNESS: single  
678 (D) TOPOLOGY: linear  
679  
680 (ii) MOLECULE TYPE: peptide  
681

*Seq 32 through 38 missing  
(back pages)*

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/229,751

DATE: 04/27/1999

TIME: 10:35:30

INPUT SET: S31624.raw

682 (iii) HYPOTHETICAL: NO  
683  
684 (iv) ANTI-SENSE: NO  
685  
686  
687  
688 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:  
689  
690 Asn His Phe Leu Pro  
691 1 5  
692

*Seq 46 through 50 missing*

## --&gt; 819 (2) INFORMATION FOR SEQ ID NO:51:

820  
821 (i) SEQUENCE CHARACTERISTICS:  
822 (A) LENGTH: 7 amino acids  
823 (B) TYPE: amino acid  
824 (C) STRANDEDNESS: single  
825 (D) TOPOLOGY: linear

*(back page)*

*OK*  
826  
827 (ii) MOLECULE TYPE: peptide  
828  
829 (iii) HYPOTHETICAL: NO  
830  
831 (iv) ANTI-SENSE: NO  
832  
833  
834

835 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:  
836  
837 Lys Pro Arg Gln Pro Gly Leu  
838 1 5  
839

*Seq 57 through 59 missing*

## --&gt; 946 (2) INFORMATION FOR SEQ ID NO:60:

947  
948 (i) SEQUENCE CHARACTERISTICS:  
--> 949 (A) LENGTH: 21 base pairs  
950 (B) TYPE: nucleic acid  
951 (C) STRANDEDNESS: single  
952 (D) TOPOLOGY: linear

*(back page)*

953  
954 (ii) MOLECULE TYPE: DNA (genomic)  
955  
956 (iii) HYPOTHETICAL: NO  
957  
958 (iv) ANTI-SENSE: NO  
959

960  
961  
962 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:  
963  
964 AATAGTGTGA CTCTTGAGCC G

*same format even as displayed in previous sequences*

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/229,751

DATE: 04/27/1999

TIME: 10:35:31

INPUT SET: S31624.raw

965 21  
966

---

967 (2) INFORMATION FOR SEQ ID NO:61:  
968  
969 (i) SEQUENCE CHARACTERISTICS:  
--> 970 (A) LENGTH: 21 base pairs  
971 (B) TYPE: nucleic acid  
972 (C) STRANDEDNESS: single  
973 (D) TOPOLOGY: linear  
974  
975 (ii) MOLECULE TYPE: DNA (genomic)  
976  
977 (iii) HYPOTHETICAL: NO  
978  
979 (iv) ANTI-SENSE: NO  
980  
981  
982  
--> 983 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:  
984  
985 AAGCCGAGGC AGCCGGGTTT G  
986 21  
987

61  
62

*format error*

---

988 (2) INFORMATION FOR SEQ ID NO:62:  
989  
990 (i) SEQUENCE CHARACTERISTICS:  
--> 991 (A) LENGTH: 21 base pairs  
992 (B) TYPE: nucleic acid  
993 (C) STRANDEDNESS: single  
994 (D) TOPOLOGY: linear  
995  
996 (ii) MOLECULE TYPE: DNA (genomic)  
997  
998 (iii) HYPOTHETICAL: NO  
999  
1000 (iv) ANTI-SENSE: NO  
1001  
1002  
1003  
1004 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:  
1005  
1006 TCTACTCCGG CGTGGCTGTC G  
1007 21  
1008

*format error*

---

1009 (2) INFORMATION FOR SEQ ID NO:63:  
1010  
1011 (i) SEQUENCE CHARACTERISTICS:  
--> 1012 (A) LENGTH: 21 base pairs  
1013 (B) TYPE: nucleic acid  
1014 (C) STRANDEDNESS: single

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/229,751DATE: 04/27/1999  
TIME: 10:35:31

INPUT SET: S31624.raw

1015 (D) TOPOLOGY: linear  
1016  
1017 (ii) MOLECULE TYPE: DNA (genomic)  
1018  
1019 (iii) HYPOTHETICAL: NO  
1020  
1021 (iv) ANTI-SENSE: NO  
1022  
1023  
1024  
1025 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:  
1026  
1027 ACTAGTCAGA ATGTGCGGAC G  
1028 21  
1029

--> 1030 (2) INFORMATION FOR SEQ ID NO:64:  
1031  
1032 (i) SEQUENCE CHARACTERISTICS:  
1033 (A) LENGTH: 21 base pairs  
1034 (B) TYPE: nucleic acid  
1035 (C) STRANDEDNESS: single  
1036 (D) TOPOLOGY: linear  
1037  
1038 (ii) MOLECULE TYPE: DNA (genomic)  
1039  
1040 (iii) HYPOTHETICAL: NO  
1041  
1042 (iv) ANTI-SENSE: NO  
1043  
1044  
1045  
1046 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:  
1047  
1048 ACTTATCCTA TTCCGATTCG T  
1049 21  
1050

--> 1051 (2) INFORMATION FOR SEQ ID NO:65:  
1052  
1053 (i) SEQUENCE CHARACTERISTICS:  
1054 (A) LENGTH: 21 base pairs  
1055 (B) TYPE: nucleic acid  
1056 (C) STRANDEDNESS: single  
1057 (D) TOPOLOGY: linear  
1058  
1059 (ii) MOLECULE TYPE: DNA (genomic)  
1060  
1061 (iii) HYPOTHETICAL: NO  
1062  
1063 (iv) ANTI-SENSE: NO  
1064  
1065

*format error*

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/229,751DATE: 04/27/1999  
TIME: 10:35:31

INPUT SET: S31624.raw

1066  
1067 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:  
1068  
1069 ACTTATCCTA TTCCGTTTCG T  
1070 21  
1071

1072 (2) INFORMATION FOR SEQ ID NO:66:  
1073  
1074 (i) SEQUENCE CHARACTERISTICS:  
--> 1075 (A) LENGTH: 21 base pairs  
1076 (B) TYPE: nucleic acid  
1077 (C) STRANDEDNESS: single  
1078 (D) TOPOLOGY: linear  
1079  
1080 (ii) MOLECULE TYPE: DNA (genomic)  
1081  
1082 (iii) HYPOTHETICAL: NO  
1083  
1084 (iv) ANTI-SENSE: NO  
1085  
1086  
1087  
1088 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:  
1089  
1090 TCTTATCCTC ATGGTCAGAT T  
1091 21  
1092

1093 (2) INFORMATION FOR SEQ ID NO:67:  
1094  
1095 (i) SEQUENCE CHARACTERISTICS:  
--> 1096 (A) LENGTH: 21 base pairs  
1097 (B) TYPE: nucleic acid  
1098 (C) STRANDEDNESS: single  
1099 (D) TOPOLOGY: linear  
1100  
1101 (ii) MOLECULE TYPE: DNA (genomic)  
1102  
1103 (iii) HYPOTHETICAL: NO  
1104  
1105 (iv) ANTI-SENSE: NO  
1106  
1107  
1108  
1109 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:  
1110  
1111 TTTACTGGGA CTCTTAATCC T  
1112 21  
1113

1114 (2) INFORMATION FOR SEQ ID NO:68:  
1115

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/229,751DATE: 04/27/1999  
TIME: 10:35:32

INPUT SET: S31624.raw

1116 (i) SEQUENCE CHARACTERISTICS:  
--> 1117 (A) LENGTH: 21 bas pairs  
1118 (B) TYPE: nucleic acid  
1119 (C) STRANDEDNESS: single  
1120 (D) TOPOLOGY: linear  
1121  
1122 (ii) MOLECULE TYPE: DNA (genomic)  
1123  
1124 (iii) HYPOTHETICAL: NO  
1125  
1126 (iv) ANTI-SENSE: NO  
1127  
1128  
1129  
1130 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:  
1131  
1132 ACTTATCCGG TGCCGCATCG G  
1133 21  
1134

1135 (2) INFORMATION FOR SEQ ID NO:69:  
1136  
1137 (i) SEQUENCE CHARACTERISTICS:  
--> 1138 (A) LENGTH: 21 base pairs  
1139 (B) TYPE: nucleic acid  
1140 (C) STRANDEDNESS: single  
1141 (D) TOPOLOGY: linear  
1142  
1143 (ii) MOLECULE TYPE: DNA (genomic)  
1144  
1145 (iii) HYPOTHETICAL: NO  
1146  
1147 (iv) ANTI-SENSE: NO  
1148  
1149  
1150  
1151 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:  
1152  
1153 CGGACTCCTT CGCTTCCTAG T  
1154 21  
1155

1156 (2) INFORMATION FOR SEQ ID NO:70:  
1157  
1158 (i) SEQUENCE CHARACTERISTICS:  
--> 1159 (A) LENGTH: 21 base pairs  
1160 (B) TYPE: nucleic acid  
1161 (C) STRANDEDNESS: single  
1162 (D) TOPOLOGY: linear  
1163  
1164 (ii) MOLECULE TYPE: DNA (genomic)  
1165  
1166 (iii) HYPOTHETICAL: NO

*same*

INPUT SET: S31624.raw

1167  
1168 (iv) ANTI-SENSE: NO  
1169  
1170  
1171  
1172 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:  
1173  
1174 TTTAGTGTTC CTCGTATGCC G  
1175 21  
1176

*format run**seq 71 through 79 missing*

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--> 1177 (2) INFORMATION FOR SEQ ID NO:80:*(back page)*

1178  
1179 (i) SEQUENCE CHARACTERISTICS:  
1180 (A) LENGTH: 12 amino acids  
1181 (B) TYPE: amino acid  
1182 (C) STRANDEDNESS: single  
1183 (D) TOPOLOGY: linear  
1184  
1185 (ii) MOLECULE TYPE: peptide  
1186  
1187 (iii) HYPOTHETICAL: NO  
1188  
1189 (iv) ANTI-SENSE: NO  
1190  
1191  
1192  
1193 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:  
1194  
1195 Asn His Phe Leu Lys Ser Gln Pro Gly Val Val Thr  
1196 1 5 10  
1197

*OK**seq 88 through 98 missing*

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--> 1345 (2) INFORMATION FOR SEQ ID NO:99:*(back page)*

1346  
1347 (i) SEQUENCE CHARACTERISTICS:  
1348 (A) LENGTH: 11 amino acids  
1349 (B) TYPE: amino acid  
1350 (C) STRANDEDNESS: single  
1351 (D) TOPOLOGY: linear  
1352  
1353 (ii) MOLECULE TYPE: peptide  
1354  
1355 (iii) HYPOTHETICAL: NO  
1356  
1357 (iv) ANTI-SENSE: NO  
1358  
1359  
1360  
1361 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:  
1362  
1363 Asn His Phe Leu Pro Lys Val Gly Gly Gly Cys  
1364 1 5 10

*OK*



INPUT SET: S31624.raw

1365

---

1387 (2) INFORMATION FOR SEQ ID NO:101:  
1388  
1389 (i) SEQUENCE CHARACTERISTICS:  
--> 1390 (A) LENGTH: 21 base pairs  
1391 (B) TYPE: nucleic acid  
1392 (C) STRANDEDNESS: single  
1393 (D) TOPOLOGY: linear  
1394  
1395 (ii) MOLECULE TYPE: DNA (genomic)  
1396  
1397 (iii) HYPOTHETICAL: NO  
1398  
1399 (iv) ANTI-SENSE: NO  
1400  
1401  
1402  
1403 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:  
1404  
1405 ACGCATCGTT TGCCTTCTCG G  
1406 21  
1407

---

1408 (2) INFORMATION FOR SEQ ID NO:102:  
1409  
1410 (i) SEQUENCE CHARACTERISTICS:  
--> 1411 (A) LENGTH: 21 base pairs  
1412 (B) TYPE: nucleic acid  
1413 (C) STRANDEDNESS: single  
1414 (D) TOPOLOGY: linear  
1415  
1416 (ii) MOLECULE TYPE: DNA (genomic)  
1417  
1418 (iii) HYPOTHETICAL: NO  
1419  
1420 (iv) ANTI-SENSE: NO  
1421  
1422  
1423  
1424 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:  
1425  
1426 GTTACTAGTA GGGGGAATGT T  
1427 21  
1428

---

1429 (2) INFORMATION FOR SEQ ID NO:103:  
1430  
1431 (i) SEQUENCE CHARACTERISTICS:  
--> 1432 (A) LENGTH: 21 base pairs  
1433 (B) TYPE: nucleic acid  
1434 (C) STRANDEDNESS: single  
1435 (D) TOPOLOGY: linear

*format error*

INPUT SET: S31624.raw

1436  
1437 (ii) MOLECULE TYPE: DNA (genomic)  
1438  
1439 (iii) HYPOTHETICAL: NO  
1440  
1441 (iv) ANTI-SENSE: NO  
1442  
1443  
1444  
1445 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:  
1446  
1447 AAGCTGTGGG TGATTCCTCA G  
1448 21  
1449

1450 (2) INFORMATION FOR SEQ ID NO:104:  
1451  
1452 (i) SEQUENCE CHARACTERISTICS:  
--> 1453 (A) LENGTH: 21 base pairs  
1454 (B) TYPE: nucleic acid  
1455 (C) STRANDEDNESS: single  
1456 (D) TOPOLOGY: linear  
1457  
1458 (ii) MOLECULE TYPE: DNA (genomic)  
1459  
1460 (iii) HYPOTHETICAL: NO  
1461  
1462 (iv) ANTI-SENSE: NO  
1463  
1464  
1465  
1466 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:  
1467  
1468 TATTCGCCTC CTCATAGGCA T  
1469 21  
1470

1471 (2) INFORMATION FOR SEQ ID NO:105:  
1472  
1473 (i) SEQUENCE CHARACTERISTICS:  
--> 1474 (A) LENGTH: 21 base pairs  
1475 (B) TYPE: nucleic acid  
1476 (C) STRANDEDNESS: single  
1477 (D) TOPOLOGY: linear  
1478  
1479 (ii) MOLECULE TYPE: DNA (genomic)  
1480  
1481 (iii) HYPOTHETICAL: NO  
1482  
1483 (iv) ANTI-SENSE: NO  
1484  
1485  
1486

*format error*

✓

INPUT SET: S31624.raw

*same run*

1487 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:  
1488  
1489 TCGTATCCTC CGTATTTTGA T  
1490 21  
1491

1492 (2) INFORMATION FOR SEQ ID NO:106:  
1493  
1494 (i) SEQUENCE CHARACTERISTICS:  
--> 1495 (A) LENGTH: 21 base pairs  
1496 (B) TYPE: nucleic acid  
1497 (C) STRANDEDNESS: single  
1498 (D) TOPOLOGY: linear  
1499  
1500 (ii) MOLECULE TYPE: DNA (genomic)  
1501  
1502 (iii) HYPOTHETICAL: NO  
1503  
1504 (iv) ANTI-SENSE: NO  
1505  
1506  
1507  
1508 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:  
1509  
1510 CTTTTGTCGC CTCTGCATCG T  
1511 21  
1512

1513 (2) INFORMATION FOR SEQ ID NO:107:  
1514  
1515 (i) SEQUENCE CHARACTERISTICS:  
--> 1516 (A) LENGTH: 21 base pairs  
1517 (B) TYPE: nucleic acid  
1518 (C) STRANDEDNESS: single  
1519 (D) TOPOLOGY: linear  
1520  
1521 (ii) MOLECULE TYPE: DNA (genomic)  
1522  
1523 (iii) HYPOTHETICAL: NO  
1524  
1525 (iv) ANTI-SENSE: NO  
1526  
1527  
1528  
1529 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:  
1530  
1531 TTTGATTCTC CGCTTCGTCG G  
1532 21  
1533

1534 (2) INFORMATION FOR SEQ ID NO:108:  
1535  
1536 (i) SEQUENCE CHARACTERISTICS:

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/229,751DATE: 04/27/1999  
TIME: 10:35:34

INPUT SET: S31624.raw

--> 1537 (A) LENGTH: 21 base pairs  
1538 (B) TYPE: nucleic acid  
1539 (C) STRANDEDNESS: single  
1540 (D) TOPOLOGY: linear  
1541  
1542 (ii) MOLECULE TYPE: DNA (genomic)  
1543  
1544 (iii) HYPOTHETICAL: NO  
1545  
1546 (iv) ANTI-SENSE: NO  
1547  
1548  
1549  
1550 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:  
1551  
1552 TGGTCGCCGC TGCATAAGCA T  
1553 21  
1554

*same**seq 109 missing*

--> 1555 (2) INFORMATION FOR SEQ ID NO:110:  
1556  
1557 (i) SEQUENCE CHARACTERISTICS:  
1558 (A) LENGTH: 7 amino acids  
1559 (B) TYPE: amino acid  
1560 (C) STRANDEDNESS: single  
1561 (D) TOPOLOGY: linear  
1562  
1563 (ii) MOLECULE TYPE: peptide  
1564  
1565 (iii) HYPOTHETICAL: NO  
1566  
1567 (iv) ANTI-SENSE: NO  
1568  
1569  
1570  
1571 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:  
1572

*(back page)**ok*

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

Leu Phe Asn Lys His Val Pro Gly Gly Gly Cys  
1 5 10

*Seq 18 missing*

(2) INFORMATION FOR SEQ ID NO:19:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 7 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

*(see item 8 on Enon  
summary sheet)*

- (ii) MOLECULE TYPE: peptide
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO

09229,251

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

Asn His Phe Leu Pro Thr Ala  
1 5

→ seq 32 through 38 missing

(2) INFORMATION FOR SEQ ID NO:39:

(see item 8 on Euro  
summary sheet)

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 5 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

09/029,751

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

Asn Ser Val Thr Leu Glu Pro  
1 5

*seq 46 through 50 missing*

(2) INFORMATION FOR SEQ ID NO:51:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 7 amino acids

09/22/75

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

Phe Ser Val Pro Arg Met Pro  
1 5

*Seq 57 through 59 missing*

(2) INFORMATION FOR SEQ ID NO:60:

(i) SEQUENCE CHARACTERISTICS:



09/22/75

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

TTTAGTGTTC CTCGTATGCC G

21

*seq 71 through 79 missing*

(2) INFORMATION FOR SEQ ID NO:80:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 12 amino acids

09/229,781

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

Asn His Phe Leu Met Pro Asn Pro Leu Leu Ala Met  
1 5 10

*seq 88 through 98 missing*

(2) INFORMATION FOR SEQ ID NO:99:

(i) SEQUENCE CHARACTERISTICS:

09/229751

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

TGGTCGCCGC TGCATAAGCA T

21

*format error*

*→ seq 109 missing*

(2) INFORMATION FOR SEQ ID NO:110: